Store at 4ºC

DTT (Dithiothreitol)

#7016

192.8 mg

Support: +1-978-867-2388 (U.S.)
cellsignal.com/support

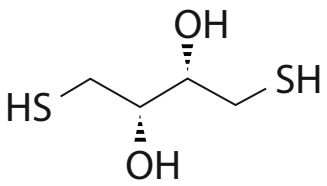
Orders: 877-616-2355 (U.S.)
orders@cellsignal.com

For Research Use Only. Not for Use in Diagnostic Procedures.

Description: Dithiothreitol (DTT) from Cell Signaling Technology is offered in a convenient 192.8 mg lyophilized format, allowing for preparation of a fresh stock solution. This DTT reagent contains no detectable DNase or RNase activity and is suitable for use in molecular biology or protein biochemistry applications that require reduction of protein disulfide bonds.

SDS-PAGE sample buffers are routinely supplemented with 10-50 mM DTT to cleave protein disulfide bonds. Lower concentrations of DTT are routinely used to stabilize enzymes or other proteins that posses free sulfhydryl groups, which is useful in chromatin immunoprecipitation (ChIP) assays.

Molecular Formula: $C_4H_{10}O_2S_2$



Molecular Weight: 154.25 g/mol

Solubility: Soluble in water at 1,500 mg/ml

Purity: >99%

Storage: Store lyophilized at 4ºC, desiccated. In lyophilized form, the chemical is stable for 12 months. Once in solution, store at -20ºC and use within 12 months to prevent loss of potency. Aliquot to avoid multiple freeze/thaw cycles.

Directions for Use: DTT is supplied as a lyophilized powder. To prepare a 1 M stock solution, reconstitute the 192.8 mg supplied in the product tube in 1.12 ml ddH_2O. The dissolved DTT will increase the final volume to approximately 1.25 ml.

Applications: W—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **FC-FP**— Flow cytometry-Fixed/Permeabilized **FC-L**— Flow cytometry-Live **E-P**—ELISA-Peptide
Species Cross-Reactivity: H—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse
All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.